COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF THE SOUTHERN MADISON WATER DISTRICT, A WATER DISTRICT ORGANIZED PURSUANT TO CHAPTER 74 OF THE KENTUCKY RE-VISED STATUTES, OF MADISON COUNTY, KENTUCKY, FOR: (I) APPROVAL OF THE ADJUSTMENT OF WATER RATES PROPOSED TO BE CHARGED BY THE DISTRICT TO CUSTOMERS OF THE DISTRICT: (II) A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY, AUTHORIZING AND PERMITTING SAID WATER DISTRICT TO CONSTRUCT AN EXTENSION TO ITS WATERWORKS DISTRIBUTION SYSTEM; AND (III) APPROVAL OF THE PROPOSED PLAN OF FINANCING OF SAID IMPROVEMENTS AND EXTENSION OF SAID WATERWORKS DISTRIBUTION SYSTEM

CASE NO. 9377

ORDER

Southern Madison Water District IT IS ORDERED that ("Southern Madison") shall file an original and seven copies of the following information with the Commission with a copy to all parties of record by September 6, 1985. If the information requested or a motion for an extension of time is not filed by the stated date, the Commission may dismiss the case without preju-Southern Madison shall furnish with each response the name dice. of the witness who will be available at the public hearing for responding to questions concerning each item of information requested.

- 1. Provide hydraulic analyses, supported by computations and actual field measurements, of typical operational sequences of the existing water distribution system. These hydraulic analyses should demonstrate the operation of all pump stations and the "empty-fill" cycles of all water storage tanks. Computations are to be documented by a labeled schematic map of the system that shows pipeline sizes, lengths, connections, pumps, water storage tanks, wells, and sea level elevations of key points, as well as allocations of actual customer demands. Flows used in the analyses shall be identified as to whether they are based on average instantaneous flows, peak instantaneous flows, or any combination or variation thereof. The flows used in the analysis shall be documented by actual field measurements and customer use records. Justify fully any assumptions used in the analyses.
- 2. Provide a summary of any operational deficiencies of the existing water system that are indicated by the hydraulic analyses or that are known from experience.
- 3. Provide hydraulic analyses, supported by computations and field measurements, demonstrating the appropriateness of the engineering design of the proposed construction of additions and extensions. Justify fully any assumptions used in the analyses.
- 4. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Southern Madison's existing water line near the proposed connection point of the water line to serve Ky. 595 and Peggy Flats Road area. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.

- 5. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Southern Madison's existing water line near the proposed connection point of the Peggy Flats Road extension. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 6. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Southern Madison's existing water line near the proposed connection point of the Flat Gap Road. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 7. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Southern Madison's water line at the connection point to Berea College's water system on U.S. 25 north of Berea. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 8. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Southern Madison's water line at the connection point to Berea College's water system on U.S. 25 south of Berea. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 9. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Southern Madison's connection point to the southern portion of Berea

College's water system on Highway 595 north of Berea. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.

- 10. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Southern Madison's connection point to Berea College's water system on Highway 595 south of Berea. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 11. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Southern Madison's water line at the connection point to Berea College's water system on Highway 1617. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 12. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Southern Madison's water line on Ky. Hwy. 21 in the vicinity of the proposed Short Line Road extension. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 13. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Southern Madison's water line on Short Line Road in the vicinity of the proposed Short Line Road extension. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.

- 14. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Southern Madison's water line at the connection point to Berea College's water system on Highway 21 west of Berea. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 24-hour continuously measured pressure available on Southern Madison's water line at the connection point to Berea College's water system on Highway 21 east of Berea. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 16. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Southern Madison's water line at the connection point to Berea College's water system on Highway 1016. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 17. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Southern Madison's water line at the connection point to Berea College's water system on Slate Creek Road. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 18. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Southern Madison's water line at the connection point to Berea College's

water system on Haytie Road. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.

- 19. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Southern Madison's water line on Blue Lick Road in the vicinity of the proposed Blue Lick Road extension. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 20. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Southern Madison's water line on Ky. Hwy. 1016 in the vicinity of the proposed Blue Lick Road extension. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 21. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Southern Madison's water line on U.S. 421 in the vicinity of the proposed U.S. 421 extension. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 22. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Southern Madison's water line on U.S. 25 in the vicinity of the Herndon Lane extension. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.

- 23. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Southern Madison's water line on Old U.S. 25 in the vicinity of the Herndon Lane extension. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 24. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Southern Madison's water line on Scaffold Cane Road in the vicinity of the proposed Mason Lake Road extension. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 25. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Southern Madison's water line on Blue Lick Road in the vicinity of the Pilot Knob Road extension. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 26. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Southern Madison's water line on U.S. 421 in the vicinity of the Pilot Knob Road extension. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 27. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Southern Madison's water line on U.S. 421 in the vicinity of the Red Lick

Road (Hwy. 594) extension. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.

- 28. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Southern Madison's water line on U.S. 421 in the vicinity of the Owsley Fork Road extension. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 29. The approval from the Division of Water expires on August 17, 1985. In the event that the Commission does not enter an Order in this case prior to this date, is Southern Madison prepared to request a time extension of this approval?
- 30. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on Southern Madison's existing water line near the proposed extension for the proposed water storage tank. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.
- 31. Provide narrative description of the proposed daily operational sequences of the water system. Documentation should include the methods and mechanisms proposed to provide positive control of the proposed tank's water level. Narrative description should also include how the proposed tank will "work" (expected inflow and outflow of water and approximate times of day) and how all pumps will function. Any assumptions are to be fully supported by appropriate measurements and hydraulic calculations.

- 32. Provide a copy of each of the county court orders establishing the Southern Madison Water District and defining its boundaries.
- 33. Provide a highway map at a scale of at least one inch equals two miles marked to show Southern Madison's water distribution system. The map of the system shall show pipeline sizes, locations, and connections as well as pumps, water storage tanks and seal level elevations of key points. The map shall also be marked to show the location of the water district boundaries and labeled to indicate the appropriate court order from which each boundary was determined.
- 34. Provide a bond resolution and a schedule of principal and interest requirements for the \$805,000 bond issue to be purchased by FmHA.
- 35. Provide a depreciation schedule for the proposed water-works construction project and a separate depreciation schedule for plant-in-service during the test period. Provide copies of any studies used to determine the appropriate depreciation rates for various plant items.
- 36. Provide an income statement for the test period, classified into accounts according to the Uniform System of Accounts for Water Utilities, as prescribed by this Commission. Include a reconciliation between the statement provided with the application and the income statement filed in response to this request.
- 37. Since the proposed rates in the application filed June 28, 1985, vary from those recommended by FmHA in its Letter of

Conditions, does Southern Madison have any evidence that FmHA will give its final approval of the loan?

- 38. In numerous past cases the Commission has disallowed depreciation on facilities provided through Contributions in Aid of Construction for rate-making purposes. Provide any evidence deemed necessary as to why this rate-making practice should not be applied in this case.
- 39. Provide copies of bills for water purchased during the test period.
- 40. For the test period, provide the numbers of gallons sold to residential customers and the average number of such customers.
- 41. In regard to the proposed adjustment to test-period operating and office salaries, provide a list of the duties and responsibilities of the new employee to be hired and the approximate number of hours per week this employee will work (or is working). If this new employee has been hired, provide the date he/she began working and the compensation provided, including hourly/weekly/monthly salary and benefits.
- 42. Provide a copy of the workpapers supporting the proposed adjustment to test-period truck expense. Include an explanation of all assumptions used in the calculation.
- 43. Provide an explanation as to why the proposed adjustment to test-period truck expense should be based on the number of anticipated additional customers.
- 44. Of the anticipated 120 customers to be added, how many are expected to be residential customers?

- 45. Provide the assumptions and calculations involved in arriving at the revenue requirement requested in the application.
- 46. For each employee and commissioner of Southern Madison, provide the following information for the test year:
- a. The name, title, and total compensation received during the test period. Include a description and the amount of any fringe benefits paid for each employee and commissioner.
 - b. Total number of regular and overtime hours worked.
- c. A complete description of the duties and responsibilities of each employee and commissioner.
- d. For each employee and commissioner, provide an analysis showing changes in the level of wages and other compensation, from January 1, 1983, to the present. The analysis should include the date, the amount, and the percentage of each change.
- e. For each commissioner, provide the approximate amount of time required monthly to fulfill his duties and responsibilities in official utility business.
- 47. Provide the date of each commissioner's meeting held during the test period and indicate the total number of commissioners in attendance at each meeting.
- 48. Provide a detailed analysis of the following expenses. Include in the analysis the check or voucher number, payee, the amount, the date, and a description of the services, materials and/or labor provided in each transaction. Items of less than \$50 may be grouped with a general description of the costs included in each group:

(a) Accounting	\$ 4,916
(b) Legal	4,000
(c) Operating Supplies	11,376
(d) Computer Billing	7,821
(e) Truck Expense	5,251
(f) Utilities	2,137
(g) Office Supplies	2,628
(h) Subcontractor Maintenance & Repai	r 9,388
(i) Miscellaneous	1,710
(j) Engineering	2,254
(k) Payroll Taxes	6,264

- 49. Provide an analysis of premiums paid for insurance coverage during the test period. Also, provide an estimate of the annual cost of additional insurance on the proposed waterworks project, including the basis for the estimate.
- 50. Provide a copy of the lease agreement for the rental of office space. If no written document exists, provide complete details of any oral agreement, including a copy of the minutes of the board meeting approving such an agreement.
- 51. As part of Exhibit B, Southern Madison submitted an explanation of its pro forma adjustments to test-period operating expenses. According to the explanation in regard to depreciation expense, additional plant of \$847,000 will be depreciated over 40 years and a truck costing \$10,000 will be depreciated over 3 years. Those added together result in an annual expense of \$24,508, while South Madison's pro forma adjustment to

depreciation expense is \$27,796. Provide an explanation for this difference.

- 52. Please provide cost justification for the proposed increase in connection fees for the 3/4-inch, 1-inch, 1 1/2-inch and 2-inch connections. Cost justification forms are attached for your convenience.
- 53. The usage table shown on the billing analysis for existing customers shows the total number of bills to be 18,180. The revenue table shows a total number of bills in the amount of 18,190. Please explain this discrepancy.

Done at Frankfort, Kentucky, this 20th day of August, 1985.

PUBLIC SERVICE COMMISSION

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ATTEST: